



Contents lists available at ScienceDirect

Journal of Cleaner Production

journal homepage: www.elsevier.com/locate/jclepro

Call for papers

Systematic leadership towards sustainability[☆]Göran Broman^{a,*}, Karl-Henrik Robèrt^a, George Basile^{a,b}, Tobias Larsson^a,
Rupert Baumgartner^c, Terry Collins^d, Donald Huisingh^e^a Blekinge Institute of Technology, 371 79 Karlskrona, Sweden^b Arizona State University, Tempe, AZ, USA^c University of Graz, 8010 Graz, Austria^d Carnegie Mellon University, Pittsburg, USA^e University of Tennessee, Knoxville, USA

ARTICLE INFO

Article history:

Received 14 July 2013

Accepted 15 July 2013

Available online 2 August 2013

1. Call for papers for a Special Volume of the Journal of Cleaner Production

Systematic leadership towards sustainability implies utilization of systems thinking for step-wise approaches to transformative changes towards sustainable societies. This ‘call-for-papers’ (CfPs) for a Special Volume of the Journal of Cleaner Production is focused upon what types of research are needed for us to make the necessary local, regional, national and global changes. This CfPs is for anyone who wishes to address these challenges seriously, that is, to utilize essential aspects of leadership to contribute strategically to the transition towards sustainable societies. To successfully address these challenges, people from different sectors and disciplines must work together in a coordinated and efficient way. We wish to explore the question: What support do such transformative endeavors require and how can science contribute?

2. Scientific challenges and opportunities

People in the industrialized world live lives that, both individually and collectively, impact the world on the global scale. Since the majority of those impacts are not directly perceived by our senses, we need science to help us to develop and use relevant knowledge for supporting a culture of global and societal stewardship. It is not enough for science to respond to the question “what is happening”, that is, acquiring more and more empirical evidence of unsustainability related impacts. Nor do responses to the question “what will happen” suffice, that is, making predictions of impacts should civilization fail to put a halt to unsustainable development. Nor are responses to the question “why is this happening” sufficient, that is, descriptions of the “tragedy of the commons” and other psychological or sociological theories aiming at explaining why more is not done to stop unsustainable development. Finally, it is not enough to explore responses to questions singularly of “how can we change”, that is, to attempt to develop various solutions in isolation to individual sustainability problems.

There is now a strong need for making much more and much better use of the results from the above types of research – and for evolving our research efforts in new ways. The next big challenge and opportunity is systems science for cross-disciplinary and cross-sector leadership and innovation for *sustainability*. We need this to develop *coordinated* solutions that support each other and, together, result in societal changes at a scale and rate that are appropriate for sustainability to become a feasible option while avoiding as many of the regional and global catastrophes as possible on our way. Only through such coordinated and combined solutions is society likely to be able to resolve the myriad of sustainability related problems, such as poverty, erosion of trust in the global socio-economic system, shrinking biodiversity, climate change, eroding potential of the food-producing systems and pollution. Dealing with individual problems without a thorough understanding of their interconnectedness at a global system level often leads to new and aggravated problems, where not only the human health and ecological health dimensions are at risk, but also the economic

[☆] This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial-No Derivative Works License, which permits non-commercial use, distribution, and reproduction in any medium, provided the original author and source are credited.

* Corresponding author. Blekinge Institute of Technology, Strategic Sustainable Development, Campus Gräsvik, 371 79 Karlskrona, Sweden. Tel.: +46 455 385504.

E-mail addresses: goran.broman@bth.se (G. Broman), karl-henrik.roberrt@bth.se (K.-H. Robèrt), george.basile@asu.edu, george.basile@bth.se (G. Basile), tobias.larsson@bth.se (T. Larsson), rupert.baumgartner@uni-graz.at (R. Baumgartner), tc1u@andrew.cmu.edu (T. Collins), donaldhuisingh@comcast.net (D. Huisingh).

and self-interest dimensions. For example, serious threats, such as climate change, may lead us to focus only on reactive responses, such as curbing CO₂ emissions from the energy sector, *instead* of seeking strategic comprehensive solutions aimed at moving towards a society where all sectors are sustainably designed from a full systems perspective. Coordinated solutions for sustainability require research with the potential of supporting more cohesive and functional leadership and actions across disciplines, organizations, sectors and countries.

3. Key challenges and opportunities for authors of papers solicited for this Special Volume

We invite theoretical papers, review papers, methodological papers, original research papers and case studies that include but are not limited to addressing the following questions:

- How can goals for social and ecological sustainability be defined at a global scale and how can such system boundaries be understood to ensure that relevant aspects of the whole system (global social system within the biosphere) are fully addressed when regional, local and organizational subsystems such as governments, business, academia and other institutions are developed?
- How can sustainable resource potentials for various technical and cultural systems be estimated?
- How can relevant indicators be selected or developed and used to monitor the bridging of the gap between un-sustainability and sustainability, including indicators for human and natural capital?
- How can trade-offs be managed in a strategic way; that is, how can we balance positive and negative impacts in robust ways that align with systematic and flexible step-wise approaches to sustainability?
- How can planning and management *processes* be designed, which create an integration of approaches to achieve social and ecological sustainability and which effectively interlink short-term with long-term, small-scale with grand-scale (e.g., individuals, individual organisations, cooperatives, etc., with global sustainability goals), with ethical and political considerations on the one hand and with environmental and economic dimensions on the other?
- How can appropriate decision-support concepts, methods and tools be developed, and used to help leaders make more effective multi-factor, multi-stakeholder decisions, which support effective transition management towards sustainable societies?
- How can learning and governance of organizations and individuals be developed and built upon to effectively respond to these challenges and accelerate overall success?

These challenges call for the development of a new kind or next-generation of science, a systematic research approach linking transformative theory with enabling practice across the diversity of civilization's intellectual and functional pursuits, and which uses sustainability as a guide. To study systems from a multidimensional perspective has often, for good reason, been regarded as non-focused. This is no longer true, however. Progress in systems thinking and systems sciences has made it possible to explore and understand complex systems in many dimensions by robust and validated methods.

Concepts, methods and tools of systems thinking and systems sciences can now be effectively used for addressing sustainable

development more systematically. This requires usage of structured but flexible frameworks to make multidisciplinary cooperation fruitful. This type of research arena constructively challenges existing policies, programs, concepts, methods and tools for sustainable development, and potentially offers an inclusive and harmonizing science-based means by which to help to guide the best use of them.

The coordinating team of this Special Volume invites authors pursuing these challenges to submit their insights, visions, results, and recommendations via their papers for potential inclusion in this Special Volume.

This Special Volume of the Journal of Cleaner Production is intended to provide academics, practitioners and other interested parties a better understanding of the challenges and opportunities of leadership towards sustainability. Academics will gain new insights in '*top-of-the line*' research on the sustainability leadership arena, and governmental and corporate leaders and managers of all kinds of organizations will obtain lessons about how to utilize '*top-of-the line*' methodological and conceptual support in their decision-making opportunities. This Special Volume will include comprehensive reviews, papers on theoretical frameworks as applied to real world settings, broad, integrative, empirical studies, case studies and applied studies. Critical editorials, book reviews and software reviews are also welcomed.

4. Tentative schedule for this Special Volume

- Call for papers published during August 2013.
- Submission of 500 word, extended abstract to Professor Göran Broman (goran.broman@bth.se) by November 1, 2013.
- Responses from the Special Volume Editorial Team to the prospective authors will be sent by January 15, 2014.
- Authors will submit 'peer-review ready' documents to Elsevier via the EES system by April 30, 2014. Please select Article Type: Systematic Leadership towards Sustainability.
- Peer review/paper revision process during May–October, 2014.
- Submission of final version of all revised papers by December 15, 2014.
- Authors informed of decisions and/or about minor changes by January 15, 2015.
- Deadline for revisions of all papers, including the introductory paper for the Special Volume submitted and in the corrected proof phase by January 30, 2015.
- Publication of Special Volume by March 2015.

5. Contributions

Full papers are invited for potential publication in this Special Volume of the Journal of Cleaner Production. Submissions should be between 9000 and 10,000 words for comprehensive reviews, between 7000 and 8500 words for full research/theoretical papers with broad empirical studies and between 4000 and 5000 words for case studies. All should be developed based upon the editorial and formatting guidelines provided in the instructions for authors for the Journal of Cleaner Production, which can be accessed from the website: http://www.elsevier.com/wps/find/journaldescription.cws_home/30440/authorinstructions.

Upon receipt of the completed documents, three to six independent reviewers will be selected to provide peer reviews for each document. Upon receipt and acceptance of the author's revised or re-revised documents, all will be published in this Special Volume of the Journal of Cleaner Production.